

ABSTRACT

BACKGROUND: Lung cancer is one of the most common types of cancer causing high morbidity and mortality worldwide. The relative frequency and clinicopathological profile of different histological subtypes of primary lung cancer have been changing in recent years. An increasing incidence of lung cancer has been observed in India

AIM AND OBJECTIVES: The aim of study is to evaluate the clinical pathological and radiological profile of primary lung cancer patients in Southern Tamilnadu, India, its association of smoking and histopathological end in our region.

MATERIALS AND METHODS: This observational cross-sectional study was carried out over a period of one and a half years in Thoracic medicine department, Tirunelveli medical college. A total of 103 newly diagnosed and histopathologically confirmed cases of lung cancer were included in the study. Demographic characteristics, clinical, radiological and pathological details of each patient were recorded.

RESULTS: Our study included 103 patients with confirmed cases of lung cancer. Male to female ratio was 5:1.7 The common age group being 40-60 years, 3% of the patients were less than 40 years old age. Smoking was associated with all types of lung cancer in our study($p=0.026$) and was found in 64% patients. 85.7% of males were smokers and none of the females were smokers. The overall smoker: non-smoker ratio was 1.6:1. The most frequent symptom was cough (94%) followed by breathlessness (80%). The common comorbid conditions present in lung cancer patients were obstructive airway disease (32%) followed by diabetes mellitus (26%). The most common radiological presentation was mass lesion (75%). Right lung (65%) was commonly involved than left lung involvement (35%) of cases. Upper lobe involvement was predominantly seen in both right and left lung. Central lesion (53%) was more common than peripheral lesion ($p=0.000$). Ultrasound guided procedures show better yield for peripheral tumors whereas fiberoptic bronchoscopy guided procedures good for central type of lesions($p=0.000$). The most common histopathological type was squamous cell carcinoma (SCC) (41%) followed by adenocarcinoma (37%) and small cell lung carcinoma (6%) contradicting global histological shift. Squamous cell carcinoma was most common carcinoma in males (44%) and smokers (50%). Adenocarcinoma was common carcinoma among females ($p=0.034$) and never-smokers ($p=0.018$). The majority patients (71%) were diagnosed in the later stages of the disease (III B and IV). The average delay in seeking treatment ranges from 30 to 270 days.

CONCLUSION: It was found that Smoking still remains the principle risk factor for the causation of lung cancer. Squamous cell carcinoma remains the commonest histological subtype which signify the unchanging histological trends in our region.

KEYWORDS: Lung cancer, histopathology type, Clinico-radiological profile, smoking, squamous cell carcinoma, India